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Quality of Life in Depression Scale (QLDS) – development of the scale and Polish adaptation

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Summary

Aim. The aim of this study was to adapt the Quality of Life in Depression Scale to Polish conditions. The scale determines the quality of life, defined in terms of the concept of needs, and focuses on patients with depressive disorders. Since its basic version has been developed, the tool was adapted in many countries, also outside Europe.

Method. The adaptation procedure included the translation of the original version into Polish, followed by the English retranslation, and was performed by four independent, qualified translators. The final Polish version was verified during a pilot study.

Results. This pilot study confirmed high reliability of the Polish version of Quality of Life in Depression Scale.

Conclusion. The Quality of Life in Depression Scale (QLDS) can be considered an interesting tool in view of its broad theoretical background, and a simple procedure to complete during a clinical evaluation. The use of a specialist translation procedure, and the results of our pilot study suggest that the QLDS can be used in further research, both when evaluating a clinical population and when dealing with individual patients.

Key words: quality of life, depressive disorders, psychiatry

Introduction

The Quality of Life in Depression Scale is a questionnaire developed by Sonja M. Hunt and Stephen McKenna. Its theoretical background corresponds to the popular perception of the quality of life based on the concept of needs [1]. Many authors reported that patients' needs are not only vital to the quality of life development, but can also modulate the process of recovery and attenuate psychopathological symptoms [2-4].

Hunt and McKenna were stimulated to develop the scale by their conclusions from an unstructured interview in depressive patients. During those interviews, patients spontaneously assessed the effects of depression on their lives with regards to their needs (e.g. love, company, care), and retrospectively identified the recovery process with an increasing number of needs they could independently fulfill. Such an attitude with regards to the quality of life enables the patient to approach his/her situation from the points of view of his/her health, employment or unemployment, and having a rich or poor network of social contacts. Aside from that, one should consider how all those factors modulate the ability of fulfilling one's well established needs. This highlights the need of an individualized method for each patient in the contexts of his/her quality of life assessment, as well as the importance of using appropriate instruments.

Method

Construction of the Quality of Life in Depression Scale

The authors began their work on the QLDS with the analysis of the literature dealing with the problem of motivation [1]. As a result, the list of needs was developed that could be important in the quality of life context:

- food, sleep, activity, sex, avoidance of pain,
- providing warmth, shelter, safety, freedom from fear, stability,
- affection, love, physical contact, intimacy, devotion, communication, exchange of experiences, joint realization of goals, affiliation,
- curiosity, exploration, game, stimulation, joy, creativity, feeling of sense,
- identity, status, recognition, approval, appreciation, being useful for the others, esteem, competence, self-feeling of value, mastery, achievements, authority, independence, freedom,
- structured time,
- self-realization.

Following this, they proceeded to interview individuals currently or previously affected with depression. The aim of those interviews was to determine if depressive symptoms can modulate the aforementioned needs, and if any changes in this matter can be associated with therapeutic advances. The study included 30 patients (22 women and 8 men between 19 and 64 years of age).

After analyzing the collected material, Hunt and McKenna identified 426 statements pertaining to the problem in question. They were subjected to further selection and as a result, a set of 75 statements was obtained, from which the repeated statements were excluded; finally 41 statements were obtained. They were re-formulated to achieve the form of personal statements due to the fact that such form is effective and easily assimilated by examined individuals, which is particularly important in the case of depression patients [5].

The developed scale underwent practical verification. After obtaining informed written consent, 35 patients (22 women and 13 men between 24 and 72 years of age) took part in the study; they were asked to complete the questionnaire and express their

opinions about the instrument. None of the examined individuals reported any difficulty with completing the scale. Some added such comments as: "that is the way I feel", "that is what I have experienced", or even "I would like my doctor to ask me about this".

Following further analyses, seven statements were excluded from the questionnaire due to their low discriminative power, difficulties with responding, or potential problems with adapting the tool to other countries.

The final version of the Quality of Life in Depression Scale was tested for its psychometric aspects [6]. The reliability assessment was one of the first measurements performed. The participating patients (n=74, 31 women and 43 men, 20-70 years of age) met the following criteria: being under ambulatory or hospital care, no changes in the therapy, lack of symptoms, expressing consent to participate, another episode of depression. Three methods were used to evaluate the test: test – retest, internal coherence, and the Guttman coefficient. All of these confirmed the high reliability of the tool (the test-retest method, particularly in patients with persistent depression, resulted in 0.94 index, alpha Cronbach index: 0.97, Guttman coefficient: 0.93).

The accuracy of the scale was examined by correlating its results with those of the General Well-Being Index (GWBI) questionnaire, measuring subjective and psychological well-being. This comparison was enforced by the lack of other corresponding instrument assessing the quality of life in depression [7].

The group of participants meeting the aforementioned inclusion criteria and who did not additionally take part in any of previous tests, counted 21 men and 49 women between 18 and 80 years of age. The correlation between the two instruments, QLDS and GWBI, amounted to 0.79, suggesting the presence of an association between well -being and the quality of life [6].

The questionnaire is useful in the case of patients suffering from both mono- and bipolar affective disorders [8, 9].

Furthermore, Gregoire et al. confirmed that QLDS can be successfully used in individuals with depression who are older than 60 years of age [10].

QLDS was frequently used in various studies, e.g. those assessing the effectiveness of various treatment protocols [11-14].

One can find interesting that the development of the Quality of Life in Depression Scale took place in two countries simultaneously and involved two language versions: English and Holland one [15].

Since its basic version was developed, the test was adopted in many countries: Denmark, France, Italy, Spain, Germany, Austria, United States and Canada, Hungary, Norway, Sweden, Finland, Israel, Brazil, and Morocco [16-19].

Adaptation of the Quality of Life in Depression Scale (QLDS) to the Polish conditions -linguistic adaptation of QLDS questionnaire

The task of adapting the instrument to Polish conditions was undertaken by the Clinic of Psychiatric Diseases and Neurotic Disorders of the Gdansk Medical University's research group. After obtaining the approval to use the instrument for the purpose of scientific research from the company which holds copyrights, the questionnaire was

translated from English into Polish. The document was translated independently by a graduate of psychology and a professor of psychiatry, both of which had sufficient qualifications. After completing the work, the interpreters met and the initial Polish version was developed as a result of translation comparison and discussion.

This version was forwarded to other individuals – two British citizens fluent in Polish, employed as lecturers at the Faculty of English Philology of the Gdansk University. They have independently re-translated the Polish version into English, a procedure referred to as back translation. They compared their re-translations and approved the final, most adequate version.

The final stage of the questionnaire adaptation was the meeting of all four interpreters, including a discussion and an approval of the final version of the questionnaire.

Pilot study

Material

The examined (pilot) group comprised of 33 patients of the Clinic Psychiatric Diseases and Neurotic Disorders, who were treated due to depressive syndromes of varying etiology: affective disorders (n=15), mixed anxiety-depressive disorders (n=10), organic mood disorders (n=5), and post-schizophrenic depression (n=3).

Table 1. **Sociodemographic characteristics of examined patients**

Gender	Female Male	12 (36.4%) 21 (63.6%)
Age (years)	Mean Standard deviation	47.24 12.39
Education	Incomplete primary Primary Vocational Secondary Higher	2 7 5 9 10
Marital status	Free Married Divorced/in separation Widowed	3 22 4 4
Employment	Professionally active Pension Retired Unemployed	15 8 5 5
Type of work	Physical work Headwork	42.86% 57.14%
Source of income	Work Dole, pension Help from family Retirement	34.12% 32.94% 16.47% 16.47%

Results and discussion

As a result of the abovementioned procedure of translation, the attached Polish version of Quality of Life in Depression Scale was developed. The reliability of the questionnaire was further verified during a pilot study.

The normal distribution was verified with the non-parametric Kolmogorow-Smirnow test (Z=0.7392; p=0.6453); the result of this test enabled approval of the hypothesis according to which the distribution of the overall QLDS score does not deviate from the normal distribution.

Table 2. **Basic statistical characteristics of QLDS responses**

Question no.	Arithmetic mean	Standard error of the mean	Standard deviation	N
1	0.61	0.09	0.50	33
2	0.39	0.09	0.50	33
3	0.73	0.08	0.45	33
4	0.30	0.08	0.47	33
5	0.48	0.09	0.51	33
6	0.55	0.09	0.51	33
7	0.84	0.07	0.37	32
8	0.67	0.08	0.48	33
9	0.67	0.08	0.48	33
10	0.64	0.09	0.49	33
11	0.55	0.09	0.51	33
12	0.39	0.09	0.50	33
13	0.36	0.09	0.49	33
14	0.61	0.09	0.50	33
15	0.47	0.09	0.51	32
16	0.85	0.06	0.36	33
17	0.55	0.09	0.51	33
18	0.76	0.08	0.44	33
19	0.64	0.09	0.49	33
20	0.58	0.09	0.50	33
21	0.64	0.09	0.49	33
22	0.33	0.08	0.48	33
23	0.30	0.08	0.47	33
24	0.58	0.09	0.50	33
25	0.42	0.09	0.50	33
26	0.48	0.09	0.51	33
27	0.48	0.09	0.51	33
28	0.58	0.09	0.50	33
29	0.70	0.08	0.47	33
30	0.47	0.09	0.51	32

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31	0.55	0.09	0.51	33
32	0.66	0.09	0.48	32
33	0.38	0.09	0.49	32
34	0.52	0.09	0.51	33

Additionally, basic statistical characteristics of the Polish and English versions were compared.

Table 3. **The results of Polish and English version of QLDS – basic statistical characteristics**

Version	Range	Mean	Standard deviation
Polish	0-34	19.9	10.6
English	0-34	14.4	11.5

The Polish version of the QLDS was characterized by significantly higher mean scores when compared to the English one. This difference could result from the different criteria of patient selection. In Great Britain, the study included both hospitalized and ambulatory patients, while the Polish study solely focused on hospitalized individuals. One can assume, that the level of experienced discomfort is markedly greater in hospitalized patients, which could be one of the reasons for the withdrawal from ambulatory treatment and the necessity of hospital care.

Finally, the initial reliability of the instrument was determined, in order to verify the accuracy of its translation among others. Various methods were used, and the results were expressed as reliability indices. Their comparison revealed that both the original and the Polish version of the instrument were characterized by high reliability.

Table 4. **Reliability assessment of Polish and English version of QLDS**

	Reliability index		
Version	Cronbach	Guttman	Spearman-Brown
Polish	0.93	0.91	0.92
English	0.97	0.93	no data

Discussion of results

The Quality of Life if Depression Scale (QLDS) can be considered an interesting instrument both in the context of extensive clinical trials (such as those assessing treatment effectiveness) and in that of individual contacts with the patient.

The instrument has many advantages, including a distinct theoretical background. Unfortunately, this latter criterion is not met by many questionnaires used for the assessment of the quality of life, as it could lead to confusion; indeed, when using a questionnaire, we are unaware how the quality of life was defined by its author and what is actually being determined, both factors markedly hindering the result interpretation. We are optimistic regarding the transition from the lack-centered approach

used for assessing quality of life, which is still quite popular, to that focusing on the need-fulfillment and related resource utilization.

Furthermore, the questionnaire is easy to apply, both for the patients who complete it, and for the researcher who analyzes the results.

Following methodological requirements, the translation and re-translation procedures as well as a pilot study performed using the tool evidence the QLDS to be an interesting instrument, worth using in further research.

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